

INEEL/CON-02-00120
PREPRINT

Planning for Site Transition to Long-Term Stewardship: Identification of Requirements and Issues

J. Banaee

August 4, 2002 – August 8, 2002

Spectrum 2002

This is a preprint of a paper intended for publication in a journal or proceedings. Since changes may be made before publication, this preprint should not be cited or reproduced without permission of the author.

This document was prepared as a account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product or process disclosed in this report, or represents that its use by such third party would not infringe privately owned rights. The views expressed in this paper are not necessarily those of the U.S. Government or the sponsoring agency.

Planning for Site Transition to Long-Term Stewardship: Identification of Requirements and Issues

J. Banaee

Idaho National Engineering and Environmental Laboratory
P.O. Box 1625, Idaho Falls, ID 83415-3625
Email: jb6@inel.gov

Abstract—A systematic methodology is presented and applied for the identification of requirements and issues pertaining to the planning for, and transition to, long term stewardship (LTS). The method has been applied to three of the twelve identified LTS functions. The results of the application of the methodology to contaminated and uncontaminated federal real property in those three functions are presented. The issues that could be seen as impediments to the implementation of LTS are also identified for the three areas under consideration. The identified requirements are significant and in some cases complex to implement. It is clear that early and careful planning is required in all circumstances.

I. INTRODUCTION

At the INEEL, activities aimed at implementing the U.S. Department of Energy (DOE) “long-term stewardship” (LTS) program have recently intensified. In these early stages, the principal functions are planning and identification of requirements and performance objectives. Considerable work must still be performed to develop an overall LTS program that includes defining policies, identifying roles and responsibilities, and outlining required activities.

LTS refers to all activities necessary to ensure protection of human health and the environment from hazards remaining after completion of cleanup, disposal, or stabilization at a site or a portion of a site.¹ LTS activities encompass all engineered and institutional controls such as surveillance and maintenance, record-keeping, inspections, groundwater monitoring, and other activities.

This paper describes the methodology and the results of a systematic effort at identifying regulatory, statutory, and other requirements applicable to, or that may have an impact on the implementation of the DOE LTS program. In addition, potential sources of impediments or “issues” that could arise in meeting these requirements are also identified. Twelve principal LTS functions and/or phases of implementations have been identified in the overall methodology.² In this paper, three of these LTS functions are discussed in detail. The methodology is discussed in the next section, whereas the results of the study are discussed in the subsequent sections.

It is expected that LTS will be implemented at many DOE sites to ensure protection of human health and the environment and to allow unrestricted land use. The systematic methodology and the results presented in this study may therefore be useful tools to decision makers in

the planning, transition, and establishment of LTS at federal contaminated and uncontaminated sites and facilities.

The requirements and issues presented in this paper are based on research conducted to date. More issues could be expected to be uncovered following completion of review of all applicable requirement sources.

II. METHODOLOGY

The implementation of LTS requires identifying regulatory requirements and the paths and impediments (i.e., issues) to their application. A systematic approach has been devised for this identification effort. Based on an analysis of LTS activities, the requirements have been divided into 12 logical categories.² These requirement categories are recognized as the necessary key components to the formulation of a comprehensive LTS policy and associated plan. These categories, shown in Figure 1, are pre-transition activities, site transition activities, land use, stakeholder involvement, records management, information systems, financial support, surveillance and maintenance, institutional controls, emergency actions, continuous improvement, and quality. All 12 categories are briefly described below. Three are treated in full. Two of the three categories selected for full treatment address the early phases of the implementation of an LTS program. The third category addresses the ultimate land use and possible federal property transactions. Thus, the three categories fully addressed are pre-transition activities, site transition activities, and land use. In addition, the pre-transition activities are augmented to include the site mission phase, inasmuch as the requirements that apply to the planning, design and operational phases may generate additional requirements or issues for the LTS implementation.

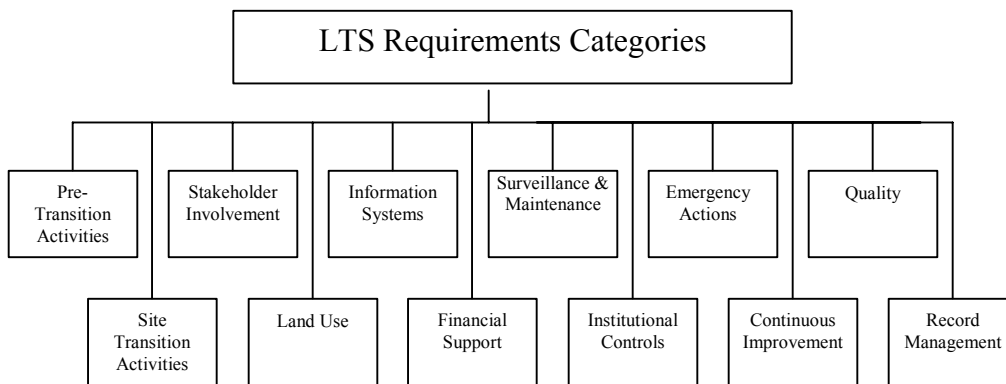


Figure 1. LTS requirement categories.

The methodology presented here is one of many that could possibly be applied. In the study conducted here, the methodology was only partly applied in order to be responsive to the needs of the sponsoring agencies.

This study focuses on identifying and analyzing requirements for contaminated and uncontaminated federal sites, as they pertain to the three specified categories, as augmented. Provided below are more detailed definitions and descriptions for the site mission activities and pre-transition activities, the transition activities, and final land use.

Pre-Transition Activities. Activities performed during the first six stages of the life cycle of a DOE site. The life-cycle activities at a site may include up to seven stages. These stages are shown in Figure 2.³ LTS is the last stage of the life cycle. Each of these stages requires planning processes that are enforced by various laws, regulations, and DOE directives. Federal statutes, establishing the requirements for cleanup and property transfer, particularly Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) play a significant role in planning processes at different stages in the life cycle of DOE activities. Reviews under the National Environmental Policy Act (NEPA) process and DOE Orders such as DOE Order 435.1, *Radioactive Waste Management*, and DOE Order 430.1A, *Life Cycle Asset Management*, cover the entire mission life-cycle.³ DOE Policy 430.1, *Land and Facility Use Planning*, further addresses

life-cycle planning activities for DOE land and facilities.

Site Transition Activities. Activities performed for the purpose of accepting designated sites into or out of the LTS National Program. These activities may include, but are not limited to, verification of site acceptance criteria, transfer of records, legal obligations, liabilities, financial obligations, and physical land.

Land-Use. The ultimate uses to be permitted for currently contaminated lands, waters, and structures at each DOE installation. Land-use decisions will strongly influence the cost of environmental management.

Stake-Holder Involvement. The process by which the LTS National Program enlists participation and obtains input from entities outside the program who have an interest in, responsibility for, or who may be impacted by LTS sites.

Records management. The planning, budgeting, organizing, directing, training, and control involved in managing the life cycle of records creation or collection, records maintenance and use, and records disposition.

Information Systems. A discrete set of information resources organized for the collection, processing, maintenance, transmission, and dissemination of information in accordance with defined procedures, whether automated or manual.

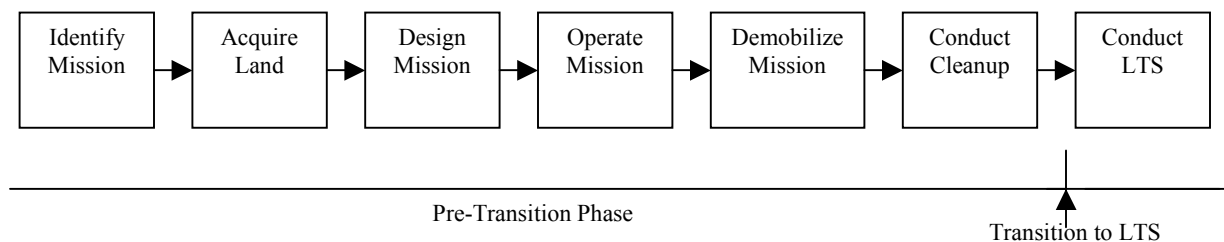


Figure 2. Life cycle of DOE mission activities.

Financial Support. Responsibilities and functions established for securing and maintaining funding to conduct stewardship activities.

Surveillance and Maintenance. Ongoing activities to ensure the protection of human health and the environment by maintaining the integrity of engineered and institutional controls, monitoring residual hazards, and taking appropriate corrective actions, when needed.

Institutional Controls. Legal and other nonengineering measures intended to affect human activities in such a way as to prevent receptors from reaching residual hazards. Such controls include land and resource management, deed restrictions, well-drilling prohibitions, building permits, hunting licenses or permits, physical measures such as markers, and facility security. Other examples include easements, deed notifications and restrictions, leases, covenants, permits, zoning, signs, fences.

Emergency Actions. Prescribed actions to prevent, mitigate, and control a situation that could cause harm to human health and/or the environment.

Continuous Improvement. The process of evaluating and implementing new methodologies to apply at LTS sites as advances in knowledge, science, technology, site conditions, societal values, regulations, and regional conditions evolve.

Quality. Those activities, management processes, and procedures that ensure program mission objectives are met while ensuring public and worker safety and protection of the environment.

III. LAND USE, CLEANUP, AND LTS

Future land use, cleanup strategies, and LTS needs are interdependent. Future land-use goals are an important in determining cleanup strategies and associated LTS needs.

DOE conducts cleanup of real property (land and facilities). DOE real property, mainly land, is the focus of LTS. Cleanup is risk-based (National Contingency Plan – NCP 40 CFR 300). Risk is based on current and future anticipated land use. Land use is the ultimate use(s) to be permitted for currently contaminated lands, land labeled as "uncontaminated," waters, and structures at each DOE site.

At the end of cleanup activities, land owned or controlled by DOE may remain indefinitely in federal control or transferred to nonfederal entities, if release requirements are met. Different jurisdictions, laws, and regulations apply to property transfers depending upon the types of real property. There are three types of real property:

"acquired land," "withdrawn land," and "other."^a DOE may transfer property under the authority of the Atomic Energy Act (AEA), General Services Administration (GSA), Bureau of Land Management (BLM), specific Congressional legislation such as the Federal Property and Administrative Services Act and the Hall Amendment to the DOE Organization Act. Real property may be transferred to the Secretary of the Interior, under direct management of the Bureau of Indian Affairs. Some DOE property, if releasable, can be declared excess and transferred to other Federal or non-Federal entities. Excess land that was withdrawn from the public domain is returned to the controlling agency (e.g., BLM, U.S. Department of the Interior, U.S. Department of Agriculture) in accordance with regulations in 41 CFR 101-47 and 201-3.³

The transfer of property that needs LTS to another federal, state, tribal, local, or private entity presents challenges to LTS implementation. Such transfers require legal agreements and institutional controls to maintain ongoing LTS responsibilities. Institutional controls are to manage residual risk (risk remaining after cleanup) and to ensure land use restrictions are maintained. Successful implementation of these institutional controls will require coordination between Federal agencies as well as Tribal, state, and local governments. The use of institutional controls, including governmental and proprietary controls) is a key element of many LTS programs.

The study presented here applies a systematic methodology to the identification of the requirements and of the issues for the specific LTS functions under consideration. The principal legal sources for LTS requirements stem from the regulations that apply to federal properties, especially regulations on property transactions. The regulations provide a basis for identifying and analyzing requirements and issues that apply or arise in the planning, new policy generation, transition to, and establishment of LTS. The methodology consists simply in an exhaustive search of the applicable regulations and sources and in a subsequent inter-comparison of the identified requirements to uncover potential issues. The relevant portions of the existing requirements relating to LTS activities involving federal contaminated and uncontaminated property transactions, as identified from the systematic survey of the relevant sources, are reviewed and presented in detail elsewhere.² The results are presented in the next two sections.

^a Acquired land is real property that DOE (or its predecessors) originally purchased. Withdrawn land is land that has been withdrawn from the public domain and reserved by the Department of the Interior for use by DOE. "Other" land is land in which DOE obtained an interest by means such as an easement, permit, or license (DOE/EH-413-9712, Cross-cut Guidance On Environmental Requirements for DOE real Property Transfers).

IV. IDENTIFICATION OF REQUIREMENTS

A systematic survey of source documents relating to LTS implementation involving federal contaminated and uncontaminated site transactions has been conducted. The results of that survey include a large number of environmental requirements imposed by different government agencies through statutes, CFRs, and DOE Directives. Each of these regulations and requirements addresses certain aspect of property transfer and property management. *Transfer* refers to transactions in which the ownership of the real property changes (e.g., sale or interagency transfer), as well as transactions in which the ownership does not change (e.g., lease or easement). Table I summarizes principal DOE Orders, federal statutes, and regulations and their respective requirements. These are presented and discussed in detail in Reference 2. Examples from the most significant of these applicable requirements are listed below:

Section 120 of 42 USC 9620 contains CERCLA statutory and regulatory requirements for federal contaminated and uncontaminated property transfers and required cleanup actions. CERCLA section 120(h) places specific requirements for DOE responsibilities prior to and after land transfer. These regulations allow transfers of certain contaminated federal real properties before completion of required CERCLA remediation activities to allow more expeditious transfers of property. In addition, mechanism of property transfer involves other regulations promulgated by the BLM, the GSA, and the U.S. Environmental Protection Agency (EPA) for reporting extent of contamination and hazardous substances on contaminated properties. All of which are codified in CFRs and also fully addressed by DOE.

DOE has provided policy, requirements, and guidance that cover all types of property transactions and environmental requirements associated with those transactions. DOE Order 435.1 addresses the entire DOE mission life-cycle and direct DOE to manage radioactive waste. DOE Order 430.1A is intended to apply over the entire life-cycle of DOE's management of real property. This Order requires a comprehensive land use planning process with stakeholder involvement, but the quality and content of land use plans are left to the discretion of DOE program directors.³

V. ISSUES IDENTIFIED FROM REQUIREMENT ANALYSIS FOR CONTAMINATED AND UNCONTAMINATED PROPERTY

Issues arise when contradictions between applicable requirements are encountered or when other applicable requirements include potential impediments to the implementation of LTS. Issues also arise when confusion or uncertainties about the intent or mode of application of the requirements are perceived. These issues are identi-

fied via a systematic comparison of all applicable requirements (i.e., statutes, regulations, etc.). The existence of an "issue" implies the need for a decision or for actions. Examples of requirements analysis and issues are listed below.

V.A. Contaminated Property

- The current framework of DOE mission activities includes the concept of LTS. However, it is recognized that DOE has not adequately or fully addressed or placed emphasis on identifying and addressing LTS activities. For example, DOE Order 435.1 direct DOE to manage radioactive waste but does not direct DOE to perform LTS for residual radioactive contamination. DOE Order 430.1A does not identify LTS as a requirement or require development of LTS plans prior to project design or execution
- The transfer of real property is subject to a variety of requirements enforced by different government agencies and through statutes, CFRs, and DOE Directives. In addition, states and local governments, institutions, and interested parties may enforce their own requirements. Each of these regulations and requirements addresses certain aspect of property transfer. Consequently, long-term management decisions could be constrained by regulations, laws, the views of affected parties, and other factors that are not easily controllable by site managers.
- It is not clear what the DOE's authority and limitations are for implementing LTS activities on DOE-owned property transfer that is also subject to other federal, state, and local requirements and regulations, in particular when the transfer results in change in ownership.
- LTS considerations have not been adequately addressed in the existing requirements or activities involving contaminated property transactions.
- Land use planning for LTS is not systematically or comprehensively addressed by the sites and their surrounding communities.
- Property transfer requirements of 42 U.S.C. 9620 CERCLA Section 120 (h) do not address LTS.
- Currently, there is no single enforceable requirement that clearly directs the planning and implementation of LTS on a property when the property is transferred.
- Property transfer for specific uses that involve human-induced changes on a site may have impact on the conditions of the site. For example, changes in hydrologic conditions for water consumption may affect the ability of isolation technologies to keep soil contaminants out of groundwater. Thus, human demand for water combined with human-induced change in the availability of contaminants in the

groundwater can create risks that might not otherwise exist.

- It appears that active or intensive LTS makes it less flexible to transfer and to reuse a property (relationship between protection of human health and the environment, economic redevelopment, the regulatory constraints on LTS, and roles and responsibilities of federal, state, and local and Tribal governments).
- There is no clause guaranteeing the DOE access to the property in case LTS is needed when the transaction results in change in ownership.
- Ensuring the continued effectiveness of LTS on the DOE owned property transfers in which ownership of the property changes (e.g., sale or interagency transfers) may not be easy.
- It appears that DOE has limited authority to engage directly in real property transfers without the BLM or GSA authorization.
- Under CERCLA 120 (h)(3), certain DOE-owned contaminated property can be transferred before completion of required cleanup actions. DOE has not developed a policy and strategy for implementing LTS after completion of cleanup.
- EPA has specified thresholds for reporting hazardous substances on a contaminated property when the property transfer results in a change in ownership. However, no thresholds are specified for reporting hazardous substances on contaminated property when leasing the property.
- There is no statutory limit of sources of information from which DOE must gather data to fulfill the requirements of CERCLA that apply to leasing contaminated property.
- Site transition may include transfer of contaminated real property in which CERCLA response actions have yet to be completed. CERCLA cleanup levels are typically risk dependent. The amount of acceptable risk, in turn, depends on the future use of a site. If the property transfer results in a change in ownership, the ownership changes hand, and the future use of site changes, it is not clear what the acceptable risk is and how it is defined for LTS.

V.B. Uncontaminated Property

- Portions of land declared as uncontaminated land must be identified under CERCLA 120 (h) for transfer to other entities. While EPA has specified threshold quantities for the identification and reporting of the contaminants on contaminated property, no such thresholds have been established to identify uncontaminated portions of land. EPA suggests the best professional judgement based on the available information should be applied to make the decision. This could leave room for confusion and arbitrary actions

with respect to identifying uncontaminated land, and to making decisions relating to future land use. This, in turn, results in confusion in the determination of acceptable health risks to people using the land and in expectations and concerns pertaining to LTS.

- It is not clear what the acceptable risk is to human health and the environment on portions of DOE sites labeled as “uncontaminated,” and how it is defined for LTS.
- Should the amount of acceptable risk depend on the future land use? If so, is there a plan for the future use of the DOE sites?
- The LTS considerations for uncontaminated property transactions, in case LTS is needed, have not been addressed or defined in the existing statutes, regulations, and DOE Orders.

VI. QUESTIONS AND ADDITIONAL NEEDS

Questions that may result in actions to be taken (possible modifications of regulations and policies that need to be devised) are identified separately from the issues mentioned above. A list of the key questions and issues is presented below:

1. Who is responsible for funding and carrying out LTS activities when a contaminated property transfer results in change in ownership?
2. If funding and management responsibilities for implementing LTS are handed over to the entity the property is transferred to, will the legal responsibility also be transferred?
3. What are DOE’s authority and limitations for implementing LTS activities on DOE-owned property transfer that is also subject to a variety of federal, state, and local laws and requirements?
4. How is the continued effectiveness of LTS on the DOE-owned property transfers in which ownership of the property changes (e.g., sale or interagency transfers) ensured?
5. Can or should a site be transferred when in an active LTS?
6. Should there be one consistent approach for funding and implementing LTS activities regardless of who the property is transferred to or whether the transfer results in a change in ownership or not?
7. How is the DOE access to the property guaranteed in case LTS is needed when the transaction results in change in ownership?
8. How clean is clean for a site’s end use, that is, is a site suitable for transfer only for limited use due to residual contamination or should it be used for waste disposal? Will it be better to have a wider range of end users by spending more now on cleanup and hence cheaper LTS?

9. Should there be a single enforceable requirement that clearly and more effectively integrate consideration of LTS into planning involving land transfer and land use?

VII. CONCLUSIONS

This paper presents a systematic method for identifying requirements applicable to the planning for, and transition to, LTS. The paper presents the results of the ap-

plication of the methodology to contaminated and uncontaminated federal real property in the case of three of the twelve LTS functions. Issues that could be impediments to the implementation of LTS are also identified for the three areas under consideration. The requirements are significant and in some cases complex to implement. It is clear that early and careful planning is required in all circumstances. The results of the study presented here should be useful to other facilities in the DOE complex.

Table I. Summary of principal DOE Orders, statutes, and regulations.

APPLICABLE SOURCE DOCUMENTS	REQUIREMENTS
DOE P 430.1 Land and Facility Use Planning	Land and Facility Use Planning is a formal, integrated planning process to ensure DOE understands what development is possible, when it is possible, and where it is possible. The comprehensive land use planning process identifies the current condition of existing land and facility assets, as well as the scope of constraints across the site and the surrounding region.
DOE O 430.1A Life Cycle Asset Management	DOE shall plan, acquire, operate, maintain, and dispose of physical assets of valuable national resources. Long-term stewardship of these physical assets shall be accomplished in a safe and cost-effective manner in order to meet DOE missions, and to ensure the protection of the workers, public, and the environment.
DOE O 430.1A Requirements, Section 6.d(1), d(5)	Asset management performance measures shall ensure formal planning and control methods for the acquisition, use, maintenance, leasing, and disposal of real estate and utilities. DOE elements are required to implement a comprehensive land use planning process which includes stakeholder involvement, and DOE shall establish a method to declare assets excess.
DOE O 430.1A Requirements, Section 6.g(1), 6.g(6)	The process for the disposition of physical assets shall ensure the application, as appropriate, of DOE Standard 1120-98, Integration of Environment, Safety, and Health into Facility Disposition Activities. This Standard identifies safety and health implications and regulatory considerations for phases of facility disposition, including deactivation, long-term surveillance and maintenance, and decommissioning.
DOE O 435.1 Radioactive Waste Management	Directs DOE to manage radioactive waste in a manner that is protective of the health and safety of workers, the public, and the environment for the entire mission life-cycle.
DOE O 5400.5 Radiation Protection of the Public and the Environment	Establishes standards and requirements for operation with respect to the protection of the public and the environment against undue risk from radiation. The order establishes public exposure standards for radiation exposure, and standards regarding levels of residual radioactive material for facilities and environmental media.
DOE O 5400.5 Definitions, Section 10.j	Release of property refers to the exercising of DOE's authority to release property from its control after confirming that the residual radioactive material over which DOE has authority on the property has been determined to meet the guidelines for residual radioactive material contained in DOE O 5400.5, or any other applicable radiological requirements.
DOE O 5400.5 Definitions, Section 10.j	There may be instances in which DOE or other authorities will impose restrictions on the management and/or use of property if the residual radioactivity material guidelines of Chapter IV are not met, or if other local, state, or Federal applicable requirements cause the imposition of such restrictions. These restrictions are an element of long-term stewardship.
DOE O 5400.5 Definitions, Section 10.l	Residual Radioactive Material refers to: any radioactive material which is in air, soil, equipment, or structures as a consequence of past operations or activities.
DOE O 5400.5 Chapter IV(2)(d), Authorized Limits	A property may be released without restrictions if residual radioactive material does not exceed authorized limits or approved supplemental limits at the time that the remedial action is completed. Properties released without restrictions are generally assumed to be properties that are "clean closed" and that will not require long-term stewardship; however, dose-based guidelines for unrestricted use may not account for other long-term stewardship requirements of the property.
DOE O 5400.5 Chapter IV(4)(a), Guidelines for Residual Radioactive Material	"Reasonable efforts" shall be made to reduce any source of radionuclides that exceeds 30 times the appropriate limit for soil, regardless of the average concentrations in the soil. This section does not explicitly state whether any such areas may be released for unrestricted use. Areas with elevated radionuclide concentrations may require long-term stewardship.

DOE O 5400.5 Chapter IV(6)(b), Control of Residual Radioactive Material – Interim Storage	Access to a property and use of onsite material contaminated by residual radioactive material should be controlled through appropriate administrative and physical controls such as those described in 40 CFR 192. These control features should be designed to provide, to the extent reasonable, an effective life of at least 25 years. Administrative controls are an element of long-term stewardship
DOE O 5400.5 Chapter IV 7(d), Supplemental Limits and Exceptions - Justification	This section requires a property analysis and a statement specifying the level of residual radioactivity to be provided to the appropriate state and/or local agencies for appropriate action (e.g., inclusion in local land records.). Such information may be used to establish institutional controls. The section, however, does not identify specific actions for the “appropriate state and/or local agencies” to implement this information about residual radioactive material remaining on site.
AEA Provisions 42 U.S.C. 2201(g), (AEA 161(g))	DOE can transfer real property under Section 161(g) without the involvement of the GSA, as long as the real property was acquired under the Act and the disposal has a programmatic effect with respect to the Act.
CERCLA Amendment - Hall Amendment, 42 U.S.C. 7256	Amends Section 646 of the DOE Organization Act of 1977 so that DOE is allowed to lease excess and unneeded property for up to ten years at DOE facilities that are to be closed or reconfigured.
42 U.S.C. 9620 CERCLA Section 120	Each department, agency, and instrumentality of the U.S. (including the executive, legislative, and judicial branches of government) shall be subject to, and comply with CERCLA Section 120.
42 U.S.C. 9620 CERCLA Section 120(e)(3)	CERCLA requires remedial actions at facilities subject to interagency agreements under CERCLA Section 120 to be completed as expeditiously as practicable.
42 U.S.C. 9620 CERCLA Section 120(e)(3)	For remedial actions subject to interagency agreements under CERCLA Section 120, each agency shall include in its annual budget submissions to the Congress a review of alternative agency funding which could be used to provide for the costs of remedial action.
42 U.S.C. 9620 CERCLA Section 120(h)(1)	Any contract for the transfer of real property (sale or lease) owned by the U.S. and on which storage (one year or more), release, or disposal of hazardous substances has occurred, shall contain notice of the type and quantity of such hazardous substance and notice of the time at which such storage, release, or disposal took place, to the extent such information is available on the basis of a complete search of files.
42 U.S.C. 9620 CERCLA Section 120(h)(3)(A)(i)(I), (II), and (III)	Each deed for the transfer of real property owned by the U.S. and on which storage (one year or more), release, or disposal of hazardous substances has occurred, shall contain the following information, to the to the extent such information is available: (I) a notice of the type and quantity of such hazardous substances, (II) a notice of the time at which such storage, release, or disposal took place, and (III) a description of the remedial action taken, if any.
42 U.S.C. 9620 CERCLA Section 120(h)(3)(A)(ii)(I) and (II)	Each deed for the transfer of real property owned by the U.S. and on which storage (one year or more), release, or disposal of hazardous substances has occurred, shall contain a covenant warranting that: (I) all remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of such transfer, and (II) any additional remedial action found to be necessary after the date of such transfer shall be conducted by the United States.
42 U.S.C. 9620 CERCLA Section 120(h)(3)(A)(iii)	Each deed for the transfer of real property owned by the U.S. and on which storage (one year or more), release, or disposal of hazardous substances has occurred, shall contain a clause granting the U.S. access to the property in any case in which remedial action or corrective action is found to be necessary after the date of such transfer.
42 U.S.C. 9620 CERCLA Section 120(h)(3)(B) and 120(h)(3)(C)]	Covenants required for the transfer or sale of real property must state that “all remedial action Necessary to protect human health and the environment ... has been taken before the date of such transfer.” Covenants required for the transfer or sale of property must grant the U.S. government access to the property in case remedial or corrective action is required.
42 U.S.C. 9620 CERCLA Section 120(h)(3)(C)(i), (ii), and (iii)	Deferral of the required covenant statement of CERCLA Section 120(h)(3)(A)(ii)(I) (warranting that all remedial action necessary has been taken) is allowed provided the following conditions are met: (1) The appropriate official [if the property is on the National Priority List (NPL)] determines that the real property is suitable for transfer and makes the deferral; (2) Response action assurances are provided in the deed or other agreement; and (3) At the conclusion of response actions, DOE executes and delivers a warranty that response actions have been taken.
42 U.S.C. 9620 CERCLA Section 120(h)(3)(C)]	Federal real property may, under certain circumstances, be transferred to other entities when remedial actions are incomplete. The agency is required to provide for any necessary restrictions on the use of the property in order to ensure the protection of human health and environment, and must submit a budget request that adequately addresses the completion of all necessary response actions, subject to Congressional authorizations and appropriations.

42 U.S.C. 9620 CERCLA Section 120(h)(4)	Requires the head of the department, agency, or instrumentality of the United States with jurisdiction over the property to identify the real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released, or disposed of.
42 U.S.C. 9620 CERCLA Section 120(h)(5)	Requires that States are notified before the agency enters into any lease of sites that are being closed, that will be encumbered by a lease for more than one year beyond the closure date of the site, or that are contaminated or were formerly contaminated. Notification shall include the length of the lease, the lessee, and allowable uses under the lease.
10 CFR 1021 DOE NEPA Regulations	This Part contains implementing regulations for the DOE NEPA Program. DOE is required to conduct a NEPA analysis for major DOE actions, including the transfer of real property and the construction, operation, and decommissioning of facilities. NEPA can be used to develop site-specific land use plans and long-term stewardship plans for DOE sites.
42 U.S.C. 7256(c) Section 3154 - Hall Amendment to Section 646(e)(1) of the DOE Organization Act National Defense Authorization Act of 1994 (NDAA)	Allows DOE to lease temporarily unneeded or excess property at DOE facilities that are to be reconfigured or closed. Under agreement with EPA, DOE is responsible for the health and safety of the public and continued environmental monitoring on the property. Prior to entering into any lease, DOE is required to obtain concurrence of EPA (for NPL sites) or the State to determine whether the environmental conditions of the property are such that leasing the property is safe and protective of public health and the environment. Leases may last for up to ten years with an option to renew if the Secretary determines that a renewal is in the public interest or promotes national security.
41 CFR 101-47 and §101-47.201-3 GSA Regulations: Utilization and Disposal of Real Property, Lands withdrawn or reserved from the public domain	This regulation requires Federal agencies to prepare annual reports of excess real property and related personal property on Standard GSA Forms. DOE is required to report to the GSA any information concerning hazardous substance activity on excess property being evaluated for transmittal and then disposal. Such information includes whether all remedial actions necessary to protect human health and environment have been taken prior to the property being reported excess.
43 CFR 2372, Procedures Public Lands: Interior, Restoration and Revocation, Procedures	Establishes general provisions for the management of Federal lands. Establishes regulations relating to public lands managed by DOI BLM and Bureau of Reclamation (BoR), including land withdrawals and sales. Provisions of this Part apply to DOE lands that have been withdrawn from BLM or BoR. Regulations require that contaminated parcels of withdrawn land be identified when they are returned to the public.

ACKNOWLEDGMENT

This work was supported by the U. S. Department of Energy (DOE) under DOE Idaho Operations Office Contract DE-AC07-99ID13727.

REFERENCES

1. *A report to Congress on Long-Term Stewardship, Volume 1, Summary Report, Final*, DOE/EM-0563 (Jan. 2001).

2. *Phase 1 Long-term Stewardship National Program Requirements Document (Draft)*, INEEL/EXT-01-01203 (Sep. 2001).

3. V. RICHARDSON, et al., *Long-Term Stewardship Study, Volume 1 - Report, Prepared to comply with the terms of a settlement agreement: Natural Resources Defense Council*, Civ. No. 97-936 (SS) (D.D.C. Dec. 12, 1998), Final Study (Oct. 2001).